

Title (en)  
Wire electric discharge machine

Title (de)  
Drahtfunkenerosionsmaschine

Title (fr)  
Machine d'usinage par électroérosion par fil

Publication  
**EP 1428602 A2 20040616 (EN)**

Application  
**EP 03256638 A 20031022**

Priority  
JP 2002310024 A 20021024

Abstract (en)  
A wire electric discharge machine capable of preventing a straightness error from being caused by consumption of a wire electrode, to thereby eliminate insufficient machining. A correction angle  $\phi$  is predetermined for preventing the straightness error of the workpiece due to consumption thereof. Correction amounts  $d1'$ ,  $d2'$  on a program plane and an upper surface of a workpiece, respectively, are determined based on the predetermined correction angle  $\phi$ , and are added to or subtracted from a predetermined offset amount depending on a wire electrode radius and an electric discharging gap, to thereby determine corrected offset amounts  $d1$ ,  $d2$  on the program plane and the upper surface of the workpiece, respectively. Correction amounts  $d1o$ ,  $d2o$  for lower and upper wire guides in an offset direction are obtained based on the corrected offset amounts  $d1$ ,  $d2$ , respectively, so that motion paths of upper and lower wire guides relative to the workpiece are determined. <IMAGE>

IPC 1-7  
**B23H 7/06**

IPC 8 full level  
**B23H 7/02** (2006.01); **B23H 1/04** (2006.01); **B23H 7/06** (2006.01); **B23H 7/18** (2006.01)

CPC (source: EP US)  
**B23H 7/065** (2013.01 - EP US); **B23H 2500/20** (2013.01 - EP US)

Citation (third parties)  
Third party :

- DE 9218090 U1 19931021 - AGIE AG IND ELEKTRONIK [CH]
- JP H0260453 B2 19901217
- JP H0260453 K2

Designated contracting state (EPC)  
CH LI

DOCDB simple family (publication)  
**US 2004084419 A1 20040506**; **US 6998561 B2 20060214**; CN 1289247 C 20061213; CN 1496773 A 20040519; EP 1428602 A2 20040616; EP 1428602 A3 20051116; JP 2004142027 A 20040520

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